Debris Monitoring

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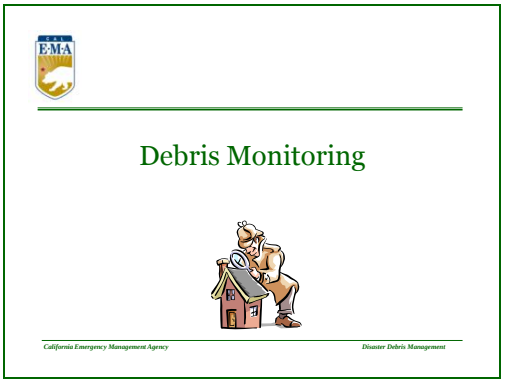
Introduction



Debris activities require monitoring by trained and supervised personnel.

- Effective debris management planning requires a thorough understanding of debris monitoring responsibilities and techniques
- Most importantly, debris monitoring is the most effective process for identifying, evaluating, and resolving debris issues

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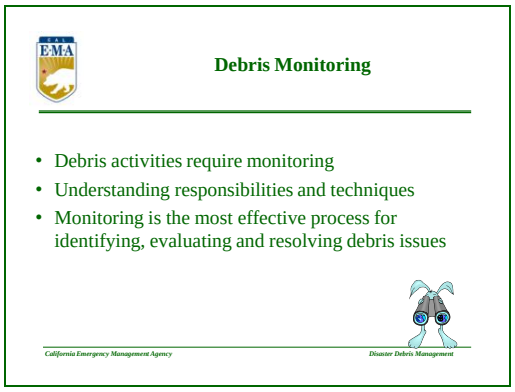
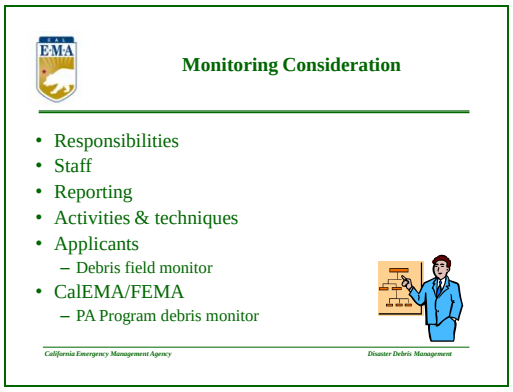
Debris Monitoring Considerations





Inadequate monitoring of debris activities often results in disputes between an applicant and the contractor, and/or the applicant and FEMA over Federal reimbursement for debris removal, reduction and disposal, and often loss of funding.

There are a number of monitoring considerations that are critical to effective monitoring of debris activities. These include:

- Responsibilities
- Staff to perform tasks
- Documentation and reporting requirements
- Monitoring activities and techniques

- It is important to recognize that the monitoring process is used to both identify and resolve debris-related issues
- It is the primary responsibility of the applicant to independently monitor all debris activities, whether performed by their own force account labor or contract
  - For the purpose of this discussion, the applicant's monitoring staff is referred to as the Debris Field Monitor
  - The Debris Field Monitor is responsible for monitoring of the specific day-to-day field activities
- In Presidentially declared events, FEMA will perform overall monitoring of an applicant's debris activities. This does not relieve applicants of any of their own monitoring responsibilities.
  - For the purpose of this discussion, FEMA's monitoring staff is referred to as the Public Assistance (PA) Program Debris Monitor

Debris Field Monitor – Applicant Responsibility

The applicant's Debris Field Monitor typically will:

- Be assigned to a specific task and be on site every day.
- Monitor specific activities at loading sites, debris management site inspection sites or landfills.
- Prepare a quantitative report of activities completed.
- Most importantly, identify and resolve debris issues.

For State/Presidentially declared disasters, it is the applicant's responsibility to provide sufficient documentation to support that:

- The scope of the work performed meets eligibility criteria.
- Often, a contractor or the applicant's own forces may perform activities that are not eligible for federal reimbursement while completing other eligible activities. Such work must be clearly identified, documented and quantified to minimize disputes when the work is completed.
- The quantities (cubic yards of debris, hours of operation, etc.) are adequately verified. The information provided by the applicant's field monitor usually provides the basis of this documentation.

Program Debris Monitor – State/ FEMA Responsibility

Cal EMA/FEMA has the authority to monitor an applicant's debris operations, whether they be performed by an applicant's force account or contract. Often, a two-person, FEMA/State team will perform this function. Generally, the Program Debris Monitor will be staffed by:

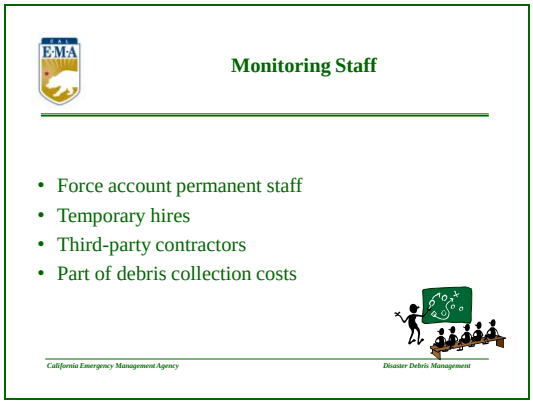
- Debris Specialists – generally the most qualified for this role but may need additional support depending on the severity of the operations and number of Specialists deployed to the disaster
- Technical Assistance Contractors – often have this expertise
- Other State and/or Federal agencies, such as Caltrans or USACE

Typically these staff will:

- Make periodic site visits, depending on the magnitude and complexity of an applicant's operations.
- Assess operations compliance with the terms of the *Project Worksheets*, the contract, and the applicant's debris monitoring plan.
- Review field notes and/or reports prepared by the Debris Field Monitors.
- Compile payment and cost documentation for an applicant's operations.
- Prepare a summary report of observations, issues and resolutions.

- Provide training to Debris Field Monitors.

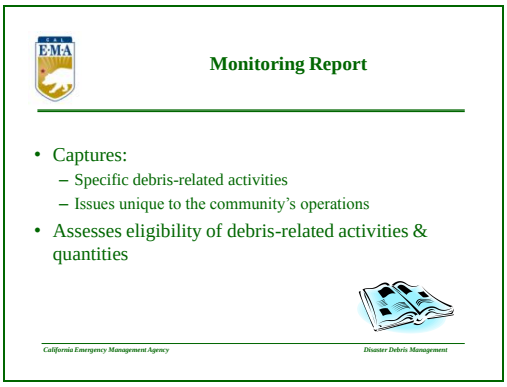
Monitoring Staff



The applicant should use full-time debris monitors to account for all debris management activities.

- The applicant should never rely solely on the records or invoices provided by the contractor
- These monitors should be trained and properly supervised
  - Cal EMA/ FEMA may provide training on State and/or Presidentially declared disasters, if necessary
- The size of the staff will depend on the operation, and may range from a few individuals who randomly monitor pickup and disposal sites (least efficient) to having a monitor at every pickup and disposal site (most efficient, most costly).
- Staffing may be provided by:
  - Local force account labor or temporary hires. Retired employees can be a good resource.
    - Overtime or straight time eligible for their staff to meet FEMA's eligibility criteria in Presidentially declared disasters is for a:
      - permanent employee
      - temporary employee
      - seasonal employees
    - Indicate that because of the regular time restrictions, many applicants choose to use contractors to perform monitoring activities for declared events.
- Engineering firms usually have staff with construction experience that could provide the monitoring functions (these do not need to be professional engineers). The debris contractor, but rather an independent engineering firm should not employ this staff.

Debris Monitoring Report



It is important to develop a monitoring system that includes a systematic method of identifying pertinent activities and recording relevant observations and data.

- A monitoring report should be developed to capture specific debris-related activities, based on the method of payment (force account or contract type) and other issues unique to the applicant's operations
- The reports may also be used to assess eligibility of debris-related activities and quantities

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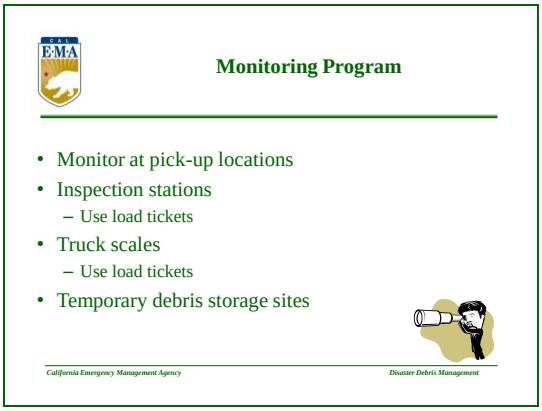
Monitoring Program



A monitoring program observes and documents the work being done at two locations, minimum – point of collection and disposal (temporary and final). Some items to document at the various monitoring points include:

- Debris Loading Area
  - Eligible debris is being picked up from contract area
  - If debris types are separated at the curbside, check that the contractor keeps it separated
  - Truck loads are full
  - Tailgates are in-place
  - If sideboards are in place
  - Time of pickup

  - Load is reasonably compact – large obstructions are not restricting placement of material. Note that if the loads are not properly loaded on compacted, debris monitors should reduce the rated volume of the truck accordingly
- Debris Unloading Area
  - Truck size is as reported on the load ticket
  - Determine proper debris quantities
  - Check time of collection for reasonable turnaround
  - Assure appropriate materials are properly segregated, such as HHW
- Debris Management Site
  - Record inactive times of contract equipment
  - If air curtain incinerators are used, assure proper procedures
  - Assure HHW is properly segregated
  - Assure safety of personnel around equipment
  - At a minimum, an elevated inspection station should be used to enable the monitor to look down into the truck to verify both the contents and the load amount.
  - Monitoring should also be performed at the exit point of the Debris Management Site to ensure the load has been sufficiently dumped.
- If the contract is by weight, then there should be a monitor at the certified scales
- One of the best methods of monitoring is to use a load ticket system as discussed on the next slide

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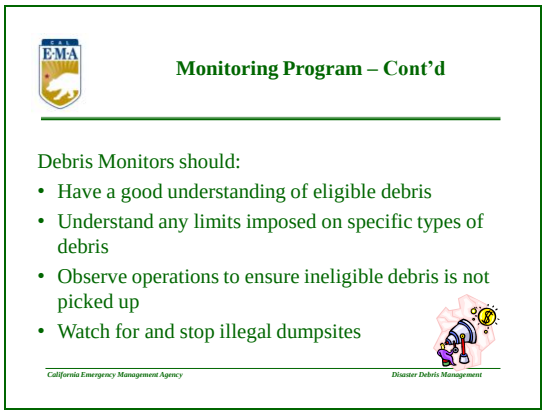
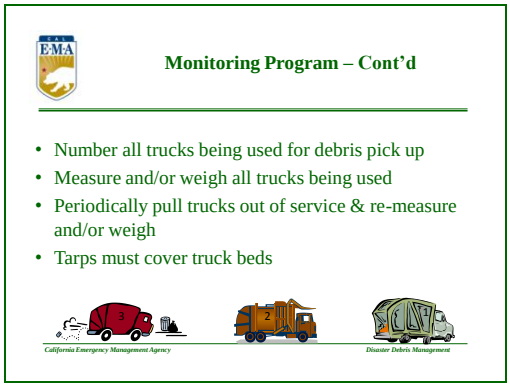
Debris Monitoring Observations



Debris activities require monitoring. Listed below are items to be aware of:

- Monitors should observe operations to ensure ineligible debris is not picked up.
- Monitors should have a good understanding of eligible debris (especially from private property) and any time limits imposed on pickup of specific types of debris. Examples (from actual occurrences) include sweeping areas for abandoned cars and white goods, cleaning up illegal dumpsites, removing cut trees from subdivisions under development, and removing/cutting trees from the right-of-way in rural areas.

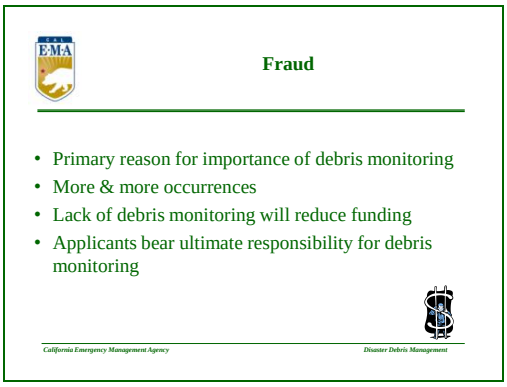
Debris Monitoring Observations – Cont'd



Prior to use, all trucks should be numbered, measured and load capacities (cubic yard or weight capacities) documented by truck number. Periodically, trucks should be pulled out of operation and re-measured.

- It is important to ensure that tare weights (empty) have been taken for each truck
- Remember that gross weight minus the tare weight equals the net weight. In this situation, the scale house operator was estimating the weight because the scale was broken. If this happens, then the quantity of material should be measured in cubic yards and converted to tons.
- California requires trucks to have tarps that cover the bed. If a monitor sees a truck without a tarp, he or she may want to take note of the truck number and report it to their supervisor. Remember that monitors are not law enforcement officers. Tickets received by the truck drivers for this are not reimbursable.
- Debris Management Sites should have only one way in and one way out or have an inspection station at the exit. Trucks have been reported driving through the disposal site without unloading, then re-entering with the same load.
  - This can be detected by observing the time of departure and time of arrival recorded on the driver's load ticket
  - This may also indicate problems with the community's debris monitors at the loading or unloading site.

Debris Management Fraud



Fraud is the primary reason that debris management has come to the forefront and under such severe scrutiny. During several disasters, glaring incidents of fraud have occurred that have given rise to the importance placed on debris monitoring.

One instance is that after a major hurricane struck Guam; various officials from FEMA and Guam were flying over the area observing the damage and recovery operations. While flying over several mounds of debris it was noticed that the piles were not piles but donuts. The centers were empty, but the piles were being measured (cubic yards) as if they were whole.

During debris removal operations for the World Trade Center, the following occurred:

- FEMA installed GPS tracking devices that were removed from trucks
- Debris was picked up from non-disaster related sites

Other incidents of fraud have included:

- Occasions when contractors have added excessive water to debris loads to increase the weight when being paid by the ton. This can be detected during monitoring before the load reaches the disposal site by observing excessive water dripping from the truck bed, or by inspecting the truck bed immediately after unloading.
- Contractors have been known to weld heavy grating to trucks after being measured. This is another reason to pull trucks and re-measure them.